Remarks

This is in response to the Official Action dated August 8, 2007. Claims 1, 15, 25, 35 and 50 have been amended to specify that the network elements are not equipped with a routing function. Claim 48 has been similarly amended and in addition specifies that the communication network was not previously controlled by a control plane.

First we would like to thank the Examiner for pointing out the typographical error in claim 3, with the claim elements starting with g) and h). We believe this is a clerical error resulting from word-processing paragraph labeling. A similar error also occurred in claims 2 and 48. This was inadvertent, as can be seen by the fact that these claims were labeled as (original) and not as amended. In any event we have amended the claims to correctly label the steps beginning with step a) or element a) for each of the independent claims.

Furthermore, claim 36 has been canceled, and claim 35 has been rewritten to include a more precise of description of the subject matter of claim 36. However, we note that the subject matter of claim 36 was not rejected based on the prior art. As will be explained below, this is appropriate as the prior art does not teach the subject matter of claim 36.

With respect to claim 15, paragraph 3 of the Official Action, the claim has been amended as suggested by the Examiner.

Turning now to the anticipation rejection under 35 USC 102(b), claim 35 has been rejected as being anticipated by Wing. However, we point out that Wing does not teach the claimed subject matter as Wing assumes that the network elements themselves have a routing function. We have amended claim 35 to clarify that the NEs are not equipped with a routing function and that the server implements a single instance of a routing function for controlling routing functions for a plurality of said NEs. This has the advantage that the server can perform routing functions without upgrading said NEs to include said routing functions. This is not taught by Wing and is an improvement thereover.

Wing teaches a network wherein the network elements include routing functions and this is assumed throughout the specification and figures. In particular we point the Examiner to Figures 1 and 2 which shows an IP router is included as part of each node.

Similarly, with respect to the rejection to claim 48 (and 49), Wing does not teach the claimed subject matter, as Wing teaches a network with a control plane and requires the NEs to include a routing function. Accordingly, Wing does not teach the claimed subject matter.

Withdrawal of the 102 rejection is therefore requested.

Turning now to the claim rejections under 35 USC 103(a) as being unpatentable over Wing in view of Duncan, we respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. First we disagree with the Examiner's assertion that a person skilled in the art would be motivated to combine Wing and Duncan. Wing is directed to a network of nodes which each include a router function and is specifically directed to encoding configuration and control information into a optical signal. Indeed the title of the application is "Co-Channel Modulation".

Duncan is however directed to method determining the topology of a network, and specifically discusses embodiments directed to discovering the topology of a LAN using a spanning tree protocol. We respectfully submit there is no teaching, suggesting, or motivation to combine these references to a person skilled in the art. Furthermore, we respectfully submit that a person skilled in the art would not think to combine Wing and Duncan as suggested by the Examiner, neither addresses (or even mentions or suggests) the problem solved by the claimed invention (e.g. providing routing functions to a communication network elements which themselves are not equipped with a routing function). Furthermore we respectfully submit that the improvement represented by the claimed invention is "more then predictable use of prior art elements according to their established functions".

Furthermore, even if the references can be combined (which is not admitted but denied) we respectfully submit that the combination of references fails to teach the claimed invention. Regarding claim 46, even a combination of references fails to establish the method as defined in claim 35 from which it depends, for the reasons given. Furthermore, the Examiner admits that Wing does not teach providing a database including true topology information.

Furthermore, Duncan teaches the use of a spanning tree protocol which uses each child node to discover the children of each child node (paragraph [0015]). Accordingly, it does not teach providing the server a database including true topology information as claimed.

Turning now to the rejection of claim 1, we point out that claim 1 is directed to a server including a processing entity for implementing a routing function to provide routing resources to client NEs which are not equipped with a routing function. This is neither taught by Wing nor Duncan nor any combination thereof for the reasons already given.

With respect to the rejection to claim 15, claim 15 has also been amended to clarify that the plurality of client NEs are not equipped with a routing function such that the program element executed on the server in the communication network implements a routing function to provide routing resources to multiple client NEs which are themselves not equipped with a routing function. Once again this is not taught by either reference. In particular, as discussed above, Wing teaches the use of a routing function within each node.

Similar comments apply to overcome the rejection to claim 25.

The rejection to claims 2, 16, 24, 26 and 27 is traversed as follows. Although Wing does mention a single instance of a **control plane**, we point out to the Examiner this is not the same as what is claimed. For example, claim 2 recites the processing entity implements said routing function by running a single instance of a routing protocol. Even with the single instance of a control plane in Wing there is still one to one routing and signaling function for each node (as each node includes its own IP router function). We are claiming a server which implements a single instance of a routing function for multiple NEs. This is not taught by Wing generally or in the cited paragraphs [0434] and [0436] for the reasons given.

With respect to the rejections to claim 3 (as well 17, 27 and 38), we respectfully submit that the paragraph cited by the Examiner, paragraph [0179], not only fails to teach the claimed subject matter, but further demonstrates that Wing does not teach the claimed subject matter for the reasons already given. Quoting paragraph [0179] "For example, **if all routers are MPLS capable** one could use the appropriate CR-LDP (Constraint-based Routing –Label Distribution Protocol) message." Clearly Wing is teaching a system where each router

implements a routing function and it is not the server which implements a single instance of a distributed routing protocol as claimed.

We respectfully submit that all of the rejections fail to establish a prima facie case for the reasons already given and that each claim is patentable over the cited art. Accordingly, we respectfully request the withdrawal of the rejections and issuance of a Notice of Allowance.

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

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